

Recent Fern Literature

Prof. M. L. Fernald has published two more studies of North American ferns. In one, he takes up the question of the identity of the American plant, of Alleghanian range, which has long passed as *Asplenium Ruta-muraria*, and the species of western Eurasia to which the name properly belongs. Plants with just these ranges are rarely quite the same; in this case Prof. Fernald finds differences in rootstocks, scales, margins of fronds, and spores, which, though slight in themselves, when taken together justify the separation of the American plant as a new species, to which he gives the name *A. cryptolepis*. This is usually quite constant in foliage, as in other characters; in Ohio, however, occurs a form with lanceolate segments having long-attenuate tips, which Prof. Fernald distinguishes as var. *ohionis*.

In the second study, the alpine lady-fern, *Athyrium alpestre*, is discussed. Prof. Fernald does not agree with Dr. Maxon (AMER. FERN JOURN. 8: 120, 1918) that the American phase of this plant is a species distinct from the European; nor does he wholly concur with Prof. Butters (Rhodora 19: 204, 1917) in referring all American specimens to a var. *americanum*. He finds that certain specimens of his own collecting from Newfoundland cannot be separated from the typical *A. alpestre* of Europe; and that in addition to true var. *americanum* of western North America, there is a second variety, distinguished by its proportionately broader fronds and somewhat finer cutting, which occurs in the Gaspé Peninsula of Quebec and is accordingly called var. *gaspensis*. All are illustrated by fine photographs of herbarium specimens, taken by Prof. J. F. Collins.¹

¹ Fernald, M. L. The American representative of *Asplenium Ruta-muraria*. The eastern American occurrence of *Athyrium alpestre*. Rhodora 30: 37-49. Pls. 161-168. 1928.

In a recent number of *The Victorian Naturalist*² Mr. F. G. A. Barnard has written interestingly of *Botrychium australe* R. Br., under the title "The Story of a Meadow Moonwort," giving an account of the cultivation of a plant of this rare Australian species for a period of forty years. Several individuals were discovered on an excursion of the Field Naturalists' Club of Victoria in September, 1887, as duly chronicled at the time, the plant under discussion being one of these. It was at once planted in a five-inch pot, and has since maintained itself perfectly in the half-shade of a lath fernery. On two or three occasions it has been repotted, but more frequently, as required, only the surface soil has been renewed. "As regularly as clockwork," writes the author, it puts forth its new frond the second week in February, and this lasts until December, when it turns yellow, withers, and dies. The frondless resting period is thus very short; but this, the writer suggests, is probably owing to the unusual amount of shade and moisture furnished it. "In the open its growing period would probably be shorter and its resting period longer, and this is likely to be the reason why it is apparently so rare."

Can any of our readers match this account of *Botrychium* as a potted plant?—WILLIAM R. MAXON.

THE HARDINESS OF HARDY FERNS.—In the spring of 1927 I had occasion to study the effect of late frosts on the first fronds that appear on some of our hardy ferns. It is surprising to see the difference in resistance in such as *Dryopteris*, *Osmunda*, *Athyrium*, and *Adiantum*.

Early in April spring-like weather set in, which started many of the ferns. The last of the month we had three nights when the thermometer dropped several

² 44: 197-199. 1927.